



Attorney's Docket No. 6407P168

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Application No.: 09/666,650

Confirmation No.: 5451 Technology Center 2100

Applicant: Alan Peevers, et al.

Filed: September 20, 2000

TC/A.U. 2173

Examiner: Becker, Shawn M.

Docket No.: 6407P168

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APPEAL BRIEF B

Sir:

Further to the Notice of Appeal filed on January 23, 2004, and the Advisory Action of April 7, 2004, applicants now submit their second appeal brief.

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(1) REAL PARTY IN INTEREST.

The real party in interest in this case is the assignee, Creative Technology Limited of Singapore.

(2) RELATED APPEALS AND INTERFERENCES

None.

(3) STATUS OF CLAIMS

The status of the claims as submitted in the amendment filed on September 10, 2003 is as follows:

Claims 1-4, and 6-11 were pending.

Claims 1-2 stand rejected under § 103(a) as allegedly being unpatentable over U.S. patent no. 6,285,381 B1 ("Sawano") in view of U.S. patent no. 6,001,013 ("Ota").

Claims 3-4 and 6-11 stand rejected under § 103(a) as allegedly being unpatentable over Sawano in view of Ota and further view of U.S. patent no. 5,696,892 ("Redmann").

The status of the claims, following the amendment submitted herewith, is as follows:

Claims 3-4, and 6-7 are cancelled without prejudice.

Claims 1, 2, and 8-11 are pending and presented for appeal.

(4) STATUS OF AMENDMENTS

An amendment is submitted, herewith in response to the final rejection. Applicants submit that this amendment places the application in better form for appeal by materially reducing or simplifying the issues for appeal.

(5) SUMMARY OF INVENTION

The use of computers to play music has created a great interest in techniques of providing a visual accompaniment to the music, known as “eye candy.” This interest has been accelerated by the internet and the availability of MP3 audio files which can be downloaded and played on MP3 players, such as WinAmp, Sonique, etc., which are also downloaded. Many of these players are configured to run plug-in visualization programs. Some of these players such as LAVA (Live Audio-Visual Animation), created by the assignee of the present invention, respond in real-time to events based on characteristics of the music being played, e.g., transients (such as beats) or sounds in a selected frequency band (such as a high note played by flute).

These real-time video musical accompaniments are generally presented in a hard-wired format with limited control by the viewer. The scenes are usually designed by professional programmers and downloaded in compiled format to the users. Typically an interface is provided with minimal controls such as switching between fixed scenes, varying preset camera angles, and toggling between preset object or scene attributes. Often the original scene is entertaining and interesting but the user has ideas on how to customize or vary the scene. Accordingly, developers of event driven music visualizations are continuing to refine their products.

According to one aspect of the present invention, a video signal from an external source is texture-mapped onto an object displayed in computer-generated animation. The video signal may be generated in real-time by a video camera coupled to the computer. Thus, for example, a user may map a video image of his/her face onto an object in the animation using a template. This mapping facilitates altering the appearance of selected features of the texture-mapped video image of the face. The appearance of the texture-mapped video is altered when selected events are detected. These events can be detected in an audio signal being animated, or in the video signal. One type of video signal event can be the crossing over of a threshold value of a parameter, for example, the luminance of the video signal.

(6) ISSUES

Claims 1-2 stand rejected under § 103(a) as allegedly being unpatentable over U.S. patent no. 6,285,381 B1 (“Sawano”) in view of U.S. patent no. 6,001,013 (“Ota”).

Claims 3-4 and 6-11 stand rejected under § 103(a) as allegedly being unpatentable over Sawano in view of Ota and further view of U.S. patent no. 5,696,892 (“Redmann”).

Appellants appeal this rejection for at least the reason that neither Sawano, Ota, nor Redmann disclose all the limitations of the claims.

(7) GROUPING OF CLAIMS

Claims 1, 2, and 8-11 stand or fall together.

(8) ARGUMENT

OBVIOUSNESS REJECTIONS- 35 U.S.C. § 103(a)

Claims 1-2

Claims 1-2 stand rejected under § 103(a) as allegedly being unpatentable over Sawano in view of Ota. In regard to the rejection of claims 1-2 the Examiner states “It would have been obvious to one having ordinary skill in the art implement the dance game of Ota as predetermined operating program in Sawano....” (11/28/03, Office Action, p. 4) Applicants respectfully submit that claim 1 is not obvious in view of the combination of Sawano and Ota. Claim 1 has been amended to recite the features of claims 3, 4, 6, and 7. Thus, amended claim 1 recites the features formerly found in claim 3, particularly the features of “***displaying a face template ... scaled to match a target object included in the animation, with the feature indications corresponding to similarly oriented regions on the target object***” and “***orienting a video signal image so that an image of a face is aligned with the face template and features of the face are overlaid by feature indications of the template***”. (Claim 1, emphasis added) In addressing claim 3 in the Office Action, the Examiner concedes that Sawano and Ota do not explicitly teach “***displaying a face template that is scaled to match a target object and orienting a video signal image so that an image of a face is aligned with the face template and features of the face are overlaid by feature indications of the template.***” (11/28/03, Office Action, p. 3) Because the combination of Sawano and Ota does not disclose this feature as taught by applicants and given that claims 2, and 8-11 depend from independent claim 1, it is respectfully

submitted that claims 1, 2, and 8-11, are not made obvious under 35 U.S.C. §103(a) by Sawano in view of Ota.

Claims 3-4 and 6-11

Claims 3-4 and 6-11 stand rejected under § 103(a) as allegedly being unpatentable over Sawano, in view of Ota, and further in view of Redmann. It is respectfully submitted that it would be impermissible hindsight, based on applicant's own disclosure, to combine Sawano, Ota, and Redmann. Sawano, Ota, and Redmann do not teach or suggest a combination with each other.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071(Fed. Cir. 1988). However, nowhere is there any indication that the references provide any motivation for the recited combination. Instead, it appears the teachings of the present application have been used as a blueprint to gather together and assemble various components of the prior art in the manner contemplated by applicants. This is a classic example of the use of hindsight reconstruction, and cannot properly be used as grounds for rejecting the present claims.

The U.S. Court of Appeals for the Federal Circuit has strongly criticized such applications of hindsight by specifically indicating that when an obviousness determination is made based upon a combination of references, even a patent examiner "must show reasons that the skilled artisan, confronted with the same problems as the inventor *and with no knowledge of the claimed invention*, would select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (emphasis added). Merely indicating, as the Examiner argues in its motion, that the claimed invention would be obvious to one of ordinary skill in the art based on the combination of the references is utterly inadequate. *Rouffet*, at 1357. Instead, what is needed is a showing of motivation, either from the references themselves or the knowledge of those of ordinary skill in the art, for the combination being relied upon. *Rouffet* at 1357.

In the present case, there has been no showing of such motivation. Instead, the Examiner attempts to deconstruct the subject matter of the claims of the present application into its

constituent components, states where each such component may be found in one of the cited references, and then concludes that it would have been obvious to combine the references to arrive at the claimed invention. This bare bones analysis is not sufficient to support a determination of obviousness. The burden is on the Examiner to show *why* one be so motivated as to come up with the combination being relied upon. *Rouffet*, at 1357-1358 ("If such a rote invocation could suffice to supply a motivation to combine, the more sophisticated scientific fields would rarely, if ever, experience a patentable technical advance. Instead, in complex scientific fields [an infringer or the Patent Office] could routinely identify the prior art elements in an application, invoke the lofty level of skill, and rest its case for [obviousness]. To counter this potential weakness in the obviousness construct, the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.")

In any event, even if Sawano, Ota, and Redmann were combined, such a combination would lack one or more features of the rejected claims. Claim 1 has been amended to recite all the features of claim 3, 4, 6, and 7. In regard to the rejection of claim 7, the Examiner states in part that:

It would have been obvious to one of ordinary skill in the art to ensure the video game animation method of Sawano, Ota, and Redmann detected when the luminescence parameter passed a threshold because a very high luminescence would not show up well on the display and would distort the image.

(11/28/03, Office Action, p. 5)

Applicants respectfully disagree. Amended claim 1 recites the feature of “***altering an appearance of the texture-mapped video signal displayed on the surface of the selected object based on music events ...and altering an appearance of the texture-mapped video ...when the luminescence parameter of the video signal passes a threshold.***” (claim 1) (emphasis added). Neither Sawano, Ota, nor Redmann disclose this feature as shown by the following analysis. In fact, the Examiner concedes “Sawano, Ota, and Redman do not explicitly state detecting when the luminescence parameter of a signal passes a threshold.” (11/28/03, Office Action, p.5).

Sawano describes a device for capturing video image data and combining with original image data. (Sawano, title) With Sawano’s invention, a user of a computer game system, such as a Nintendo, can create characters or images and animate them from images obtained from a video

camera. (Sawano, abstract, col. 5, l. 65- col. 6, l. 3) Sawano allows the user to put features such as clothes, hands legs, body and hair on the characters. (Sawano, col. 9, ll. 22-26) This character can then be used in video games played by the user. (Sawano, col. 12, ll. 42-45) Sawano also discusses cutting out sections of the images obtained from the video camera to adjust the brightness, contrast, tone, etc. of the captured image data. (Sawano, col. 9, ll. 3-4) However, Sawano does not describe anywhere in his patent the claimed feature of ***“altering an appearance of the texture-mapped video signal displayed on the surface of the selected object based on music events ...and altering an appearance of the texture-mapped video ...when the luminescence parameter of the video signal passes a threshold.”*** as claimed by applicants.

Ota does not describe this feature. Ota provides a video dance game apparatus and program storage device readable by the apparatus. (Ota, title) Ota’s video game displays two images of dancers on a video screen that move according to the user’s movement of push buttons and drive levers (i.e., joystick type controls) (Ota, col. 17, l. 51- col. 18, l. 6) according to preprogrammed motions (Ota, col. 18, table 1) The players of Ota’s game are given points based on how accurately they make the dancers dance to music. (Ota, col. 22, ll. 1-5) According to one embodiment described in Ota, even when the external operation (i.e., joystick movement) is not inputted by the operation device, the image of the dancers is changed so as to perform the predetermined movement. (Ota, col. 7, ll. 29-32) However, nowhere does Ota describe ***“altering an appearance of the texture-mapped video signal displayed on the surface of the selected object based on music events ...and altering an appearance of the texture-mapped video ...when the luminescence parameter of the video signal passes a threshold”*** as stated by applicants’ claim 1.

Redmann fails to describe this feature as well. Redmann describes a method and apparatus for providing animation in a three-dimensional computer generated virtual world using a succession of textures derived from temporally related source images. (Redmann, title) Redmann can “sculpt” a virtual world face having a 3-D shape approximating the 3-D shape of a person existing in the real world. An animated texture of the face could then be placed on the 3-D shape, with care taken to align the texture image of the nose with the sculpted geometry of the nose, chin with chin, etc. (Redmann, col. 17, ll. 22-29) Redmann’s patent is silent in regard to ***“altering an appearance of the texture-mapped video signal displayed on the surface of the***

selected object based on music events ...and altering an appearance of the texture-mapped video ...when the luminescence parameter of the video signal passes a threshold” as stated by applicants’ claim 1.

Because the combination of Sawano, Ota, and Redmann does not disclose this feature as taught by applicants and, given that claims 2, and 8-11 depend from independent claim 1 and add additional features, it is respectfully submitted that claims 1, 2, and 8-11 are not made obvious under 35 U.S.C. §103(a) by Sawano, and Ota, in view of Redmann.

From at least the foregoing reasons, it is respectfully submitted that claims 1, 2, and 8-11 are allowable and allowance of the application is earnestly requested.

If there are any additional charges, please charge Deposit Account No. 02-2666. If a telephone interview would in any way expedite the prosecution of the present application, the Examiner is invited to contact Sanjeet Dutta at (408) 947-8200.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: May 3rd, 2004

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APPENDIX

1. A method of generating a computer generated animation to provide a visual accompaniment to music, comprising:
 - displaying an animation scene including a plurality of 3D objects;
 - displaying an object selection screen for allowing a user to select one object currently displayed in said animation scene as a selected object;
 - providing a video signal from a source external to the computer;
 - displaying a video selection icon;
 - displaying a face template having facial feature indications and oriented and scaled to match a target object included in the animation, with the feature indications corresponding to similarly oriented regions on the target object;
 - orienting a video signal image so that an image of a face is aligned with the face template and features of the face are overlaid by feature indications of the template;
 - mapping features of the face aligned to feature indications of the template to corresponding regions of the target object; and
 - deforming part of a surface of the target object onto which the features of the face are mapped; and wherein
 - if the user clicks the video selection icon
 - texture mapping the video signal onto the selected object in the animation scene so that a texture-mapped video signal is displayed on the surface of the selected object;
 - altering an appearance of the texture-mapped video signal displayed on the surface of the selected object based on music events;
 - detecting a selected event in the video signal being texture-mapped;
 - detecting selected events occurring during the playing of the video signal; and
 - altering the appearance of the texture-mapped video when a selected event is detected, where said act of detecting comprises detecting when the luminescence parameter of the video signal passes a threshold.
2. The method of claim 1 where said act of providing the video signal comprises:
 - using a video camera to generate the video signal in real time.

3-7. (Cancelled)

8. The method of claim 1 where said act of altering the texture-mapped video comprises:

altering an image parameter of the texture-mapped video.

9. The method of claim 1 where said altering the texture-mapped video comprises:
altering a display palette for the texture-mapped video to cause the texture-mapped video to appear blocky.

10. The method of claim 1 where said act of altering comprises:
altering the luminosity of selected areas of the texture-mapped video.

11. The method of claim 1 where said altering further comprises:
elevating a first region of the texture-mapped video when a selected event is detected; and
depressing a second region of the texture-mapped video when a selected event is detected.

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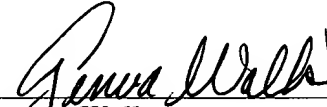
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